SANTA CRUZ BIOTECHNOLOGY, INC.

hyccin siRNA (m): sc-140741

BACKGROUND

Hyccin, also known as FAM126A, HCC, HLD5, HYCC1 or DRCTNNB1A, is a 521 amino acid cytoplasmic protein that is widely expressed with highest levels found in heart, brain, placenta, spleen and testis. Belonging to the FAM126 family, hyccin may play a role in the β-catenin/Lef signaling pathway. Hyccin is likely involved in the process of myelination of the central and peripheral nervous system. Defects in the gene encoding hyccin are the cause of leukodystrophy hypomyelinating type 5 (HLD5), which is characterized by congenital cataract, progressive neurologic impairment and diffuse myelin deficiency. Individuals affected by HLD5 experience progressive pyramidal and cerebellar dysfunction along with muscle weakness in the lower limbs. Hyccin exists as two alternatively spliced isoforms and is encoded by a gene located on human chromosome 7.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Fam126a (mouse) mapping to 5 A3.

PRODUCT

hyccin siRNA (m) is a pool of 2 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see hyccin shRNA Plasmid (m): sc-140741-SH and hyccin shRNA (m) Lentiviral Particles: sc-140741-V as alternate gene silencing products.

For independent verification of hyccin (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-140741A and sc-140741B.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

hyccin siRNA (m) is recommended for the inhibition of hyccin expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor hyccin gene expression knockdown using RT-PCR Primer: hyccin (m)-PR: sc-140741-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.